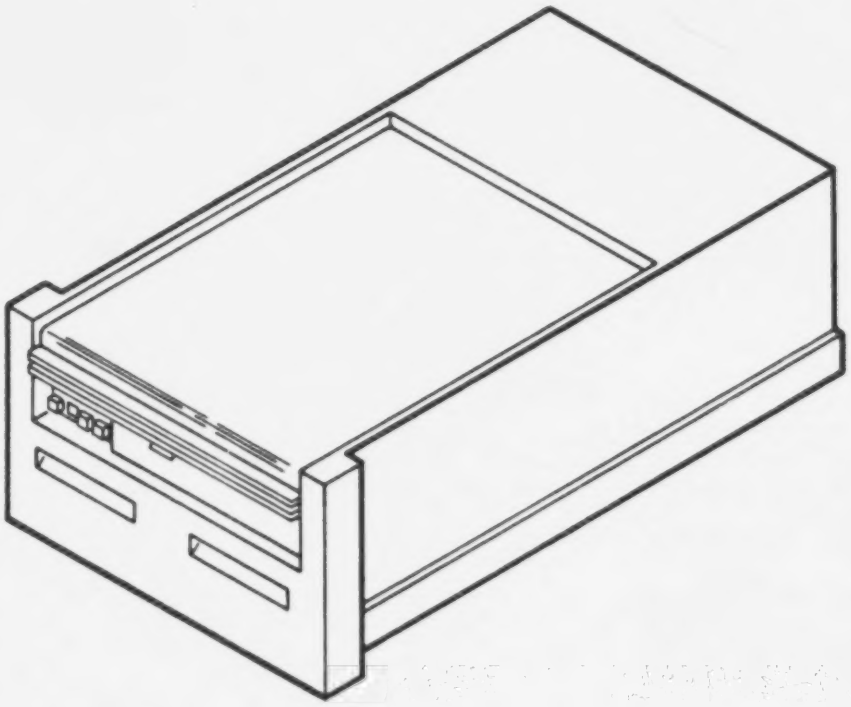
11-7025-208-10

TM 11-7025-208-10

OPERATOR'S MANUAL



EQUIPMENT DESCRIPTION PAGE 1-2

PMCS PAGE 2-2

OPERATION PAGE 2-4

TROUBLESHOOTING PROCEDURES PAGE 3-1

DISK MEMORY UNIT
MU-705/MYQ-4
(NSN 7025-01-092-2745)

HEADQUARTERS, DEPARTMENT OF THE ARMY

FEBRUARY 1984

0101-11:

READEX FICHE best copy available

WARNING

HIGH VOLTAGE

High voltage is used in the operation of this equipment.

ELECTROCUTION ON CONTACT

Electrocution may result if you fail to observe these safety precautions.

Never perform maintenance on this equipment when it is powered on. If you have operating problems or equipment failure, power off and report the problem to your supervisor.

5 SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK

1 DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL

2 IF POSSIBLE , TURN OFF THE ELECTRICAL POWER

3 IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH, OR LIFT THE PERSON TO SAFETY USING A WOODEN POLE OR A ROPE OR SOME OTHER INSULATING MATERIAL

4 SEND FOR HELP AS SOON AS POSSIBLE

5 AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION

TM 11-7025-208-10

TECHNICAL MANUAL

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 20 February 1984

OPERATOR'S MANUAL

DISK MEMORY UNIT MU-705/MYQ-4

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual, direct to: Commander, US Army Communications and Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

This manual tells you how to operate and service the Disk Memory Unit MU-705/MYQ-4.

LOCATION OF SUBJECTS IN MANUAL

In this manual, paragraphs are numbered in order by chapter. For example, paragraph 2-3 is the third paragraph in chapter 2. Pages are also numbered this way. Using this numbering system, there are two easy ways to locate the information you need in this manual.

- Front cover locators
- Subject index

Use the front cover locators and marked pages to quickly find the parts of the manual shown on the cover. If the information you need is not listed on the front cover, use the subject index at the back of this manual. It lists all subjects covered in the manual and directs you to the subject by page number.

OPERATING AND MAINTENANCE PROCEDURES

Operating and maintenance procedures in this manual have two features which help you perform them more easily:

- Initial setup boxes
- First-time performance aids

An initial setup box is used at the start of any procedure which requires setup items before you perform it. This box lists items such as tools and supplies needed to perform the procedure. If the box does not appear at the start of a procedure, it means no setup items are needed.

If you are using this manual to perform a procedure for the first time, always read through the entire procedure before you start. This will help you understand the task you will perform. Always perform the task steps in the order given. This will help assure correct performance. Use the illustrations beside the steps to find the parts of the equipment called out in the steps. Some steps include a reference to another paragraph. Go to that paragraph if you are not sure how the steps are done.

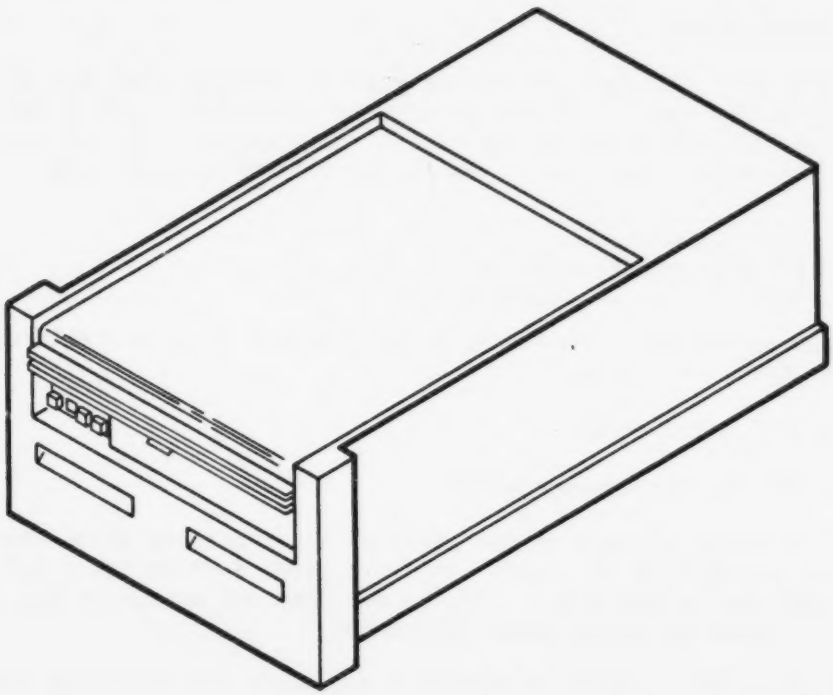


Figure 1-0. Disk Memory Unit MU-705/MYQ-4

CHAPTER 1
INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

This manual is the operator's manual for Disk Memory Unit MU-705/MYQ-4, shown in figure 1-0. In the rest of this manual it will be called the disk drive. This manual describes the disk drive and tells what it can do. It also shows you how to operate and maintain the disk drive.

This disk drive provides auxiliary memory storage capacity for a computer system.

1-2. MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

1-3. HAND RECEIPT (-HR) MANUALS

This manual has a companion document with a TM number followed by - HR (which stands for Hand Receipt). TM 11-7025-208-10-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, BII, and AAL) which you must account for. As an aid to property accountability, additional - HR manuals may be requisitioned from the following source in accordance with procedures in Chapter 3, AR310-2: The US Army Adjutant General Publications Center ATTN: AGLD-OD, 2800 Eastern Boulevard, Baltimore, MD 21220

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your disk drive needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Communications and Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

1-5. REFERENCE INFORMATION

This listing includes the nomenclature cross reference list, list of abbreviations and an explanation of terms (glossary) used in this manual.

1-6. NOMENCLATURE CROSS-REFERENCE

Common names are used throughout this manual, but you must use the official nom nclature when filling out report forms, sending an EIR, or finding referenced technical manuals.

Common Name:	Official Nomenclature:
Disk drive	Disk Memory Unit MU-705/MYQ-4

1-7. LIST OF ABBREVIATIONS

EDAC	Error detection and correction
MSU	Mass Storage Unit

1-8. GLOSSARY

EDAC	Error Detection and Correction Memory Circuit which automatically corrects hardware-caused single bit data errors.
Logical Address	The electronic address of a disk drive. Allows the CPU to find a specific drive where two or more disk drives are in the system.
Pack, Disk Pack	Magnetic media used for storage of data.

Section II. EQUIPMENT DESCRIPTION

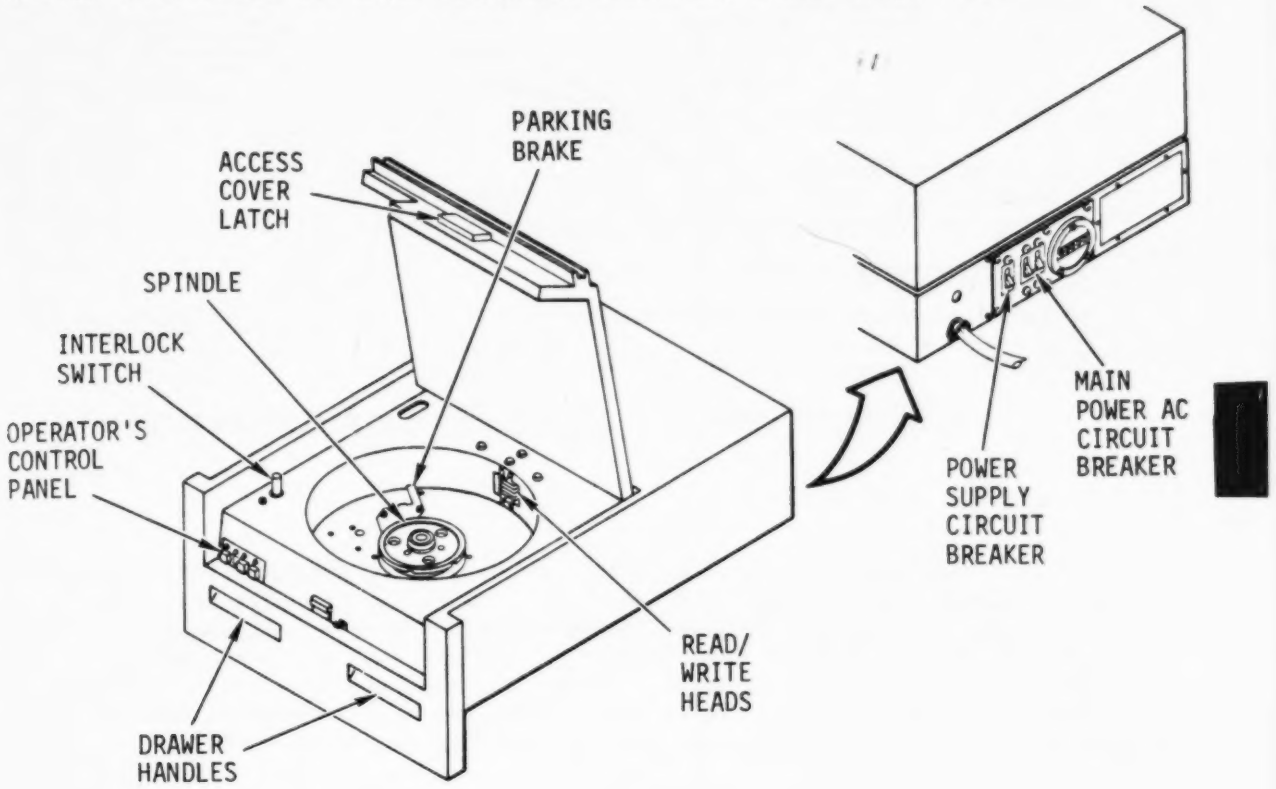
1-9. EQUIPMENT PURPOSE, CAPABILITIES, AND FEATURES

The disk drive provides auxiliary memory storage for a central processor. Capabilities and features include:

- Removable magnetic disk pack for storing and retrieving data
- Write protect circuitry to prevent writing over permanent data that must be saved
- Speed detection circuitry which detects loss of speed or power
- Error detection and correction circuitry for validity check
- Power detection circuitry for ac/dc fault check
- Check indicator circuitry to warn of fault occurance

1-10. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

The disk drive houses all major components within one drawer (fig. 1-1).



READ/WRITE HEAD - read and writes data on disk packs.

SPINDLE - positions and locks disk pack on drive mechanism.

INTERLOCK SWITCH - when pushed down by drawer cover, closes circuit and power is available to spin mechanism. This occurs when control panel START pushbutton is pressed.

DRAWER HANDLES - used to pull drawer from disk drive cabinet.

MAIN POWER AC CIRCUIT BREAKER - located behind cabinet drawer. Applies ac power to power supply, circuit breaker, and blower motor.

OPERATOR'S CONTROL PANEL - contains switches and indicators required to control and monitor the basic operation of the disk drive.

POWER SUPPLY DC CIRCUIT BREAKER - located next to ac power circuit breaker. Applies ac power to transformer that provides dc power.

PARKING BRAKE - Prevent spindle from turning while pack is being installed or removed.

Figure 1-1. Disk Drive Major Components

1-11. EQUIPMENT DATA

Weight and dimensions:
- Weight 340.0 lb (154.5 kg)
- Height 36.2 in. (92.0 cm)
- Width 23.0 in. (58.4 cm)
- Depth 36.0 in. (91.4 cm)

Operating environment:
- Temperature 50°F to 100°F (10°C to 38°C)
- Relative humidity 10% to 90% (noncondensing)

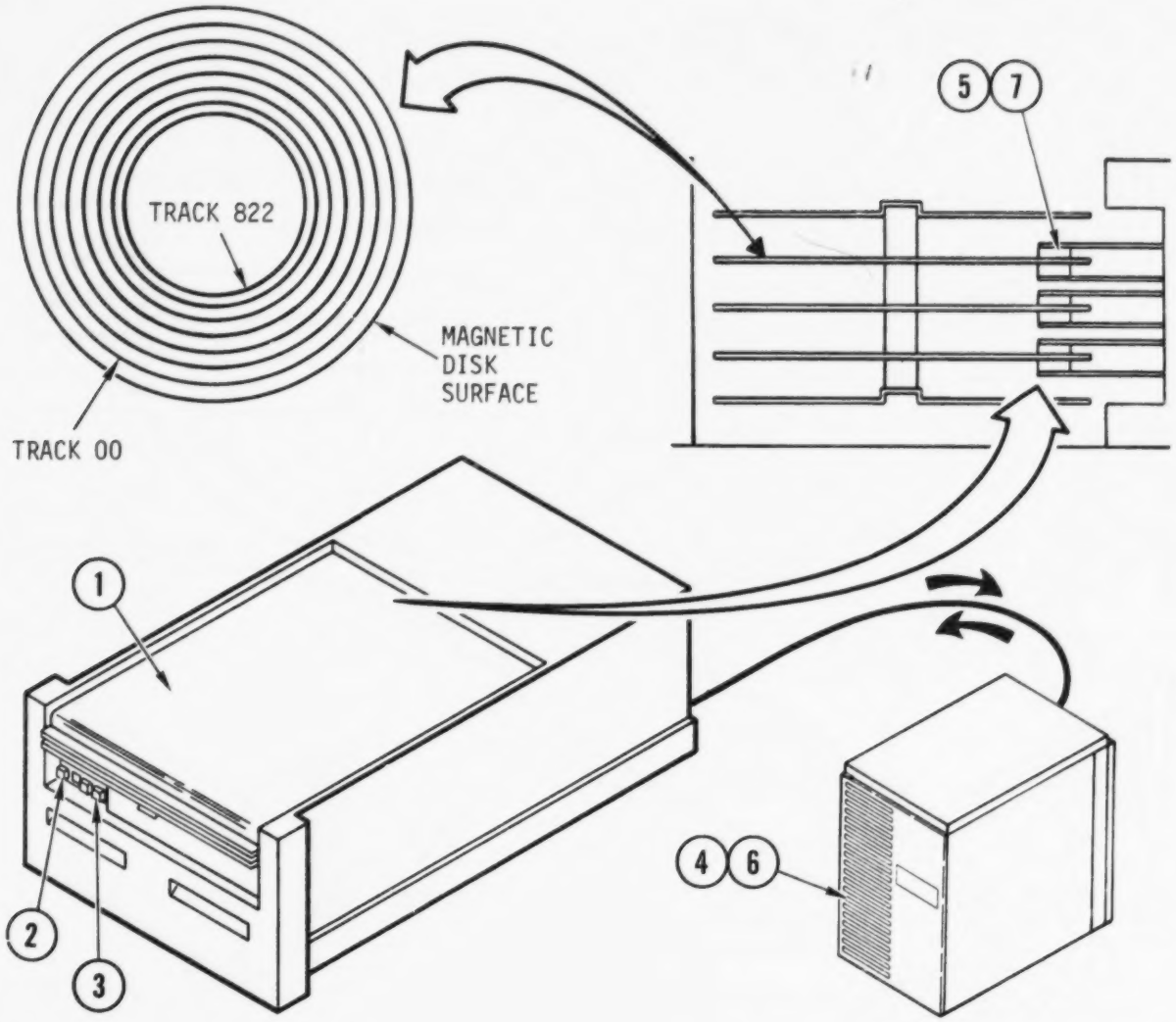
Power requirements:
- Voltage 102 V ac to 132 V ac
- Frequency 60 Hz

Section III. TECHNICAL PRINCIPLES OF OPERATION

1-12. FUNCTIONAL DESCRIPTION

The operations performed by the disk drive are done under commands initiated by a central processing unit (CPU). All functions provided by the disk drive are related to data storage and recovery (normally referred to as reading and writing). The read and write functions (fig. 1-2 and 1-3) are performed by electromagnetic devices called heads. There is a separate head positioned over each recording surface of a rotating disk pack. The heads are positioned by prerecorded information which gives address location and track number.

1-13. READ ONLY OPERATION



(1) Disk pack is loaded into disk drive.

(2) Disk drive is cycled up and READY light is lit.

(3) PROTECT light is lit. (Normally lit for read operations.)

(4) CPU sends address and commands to disk drive.

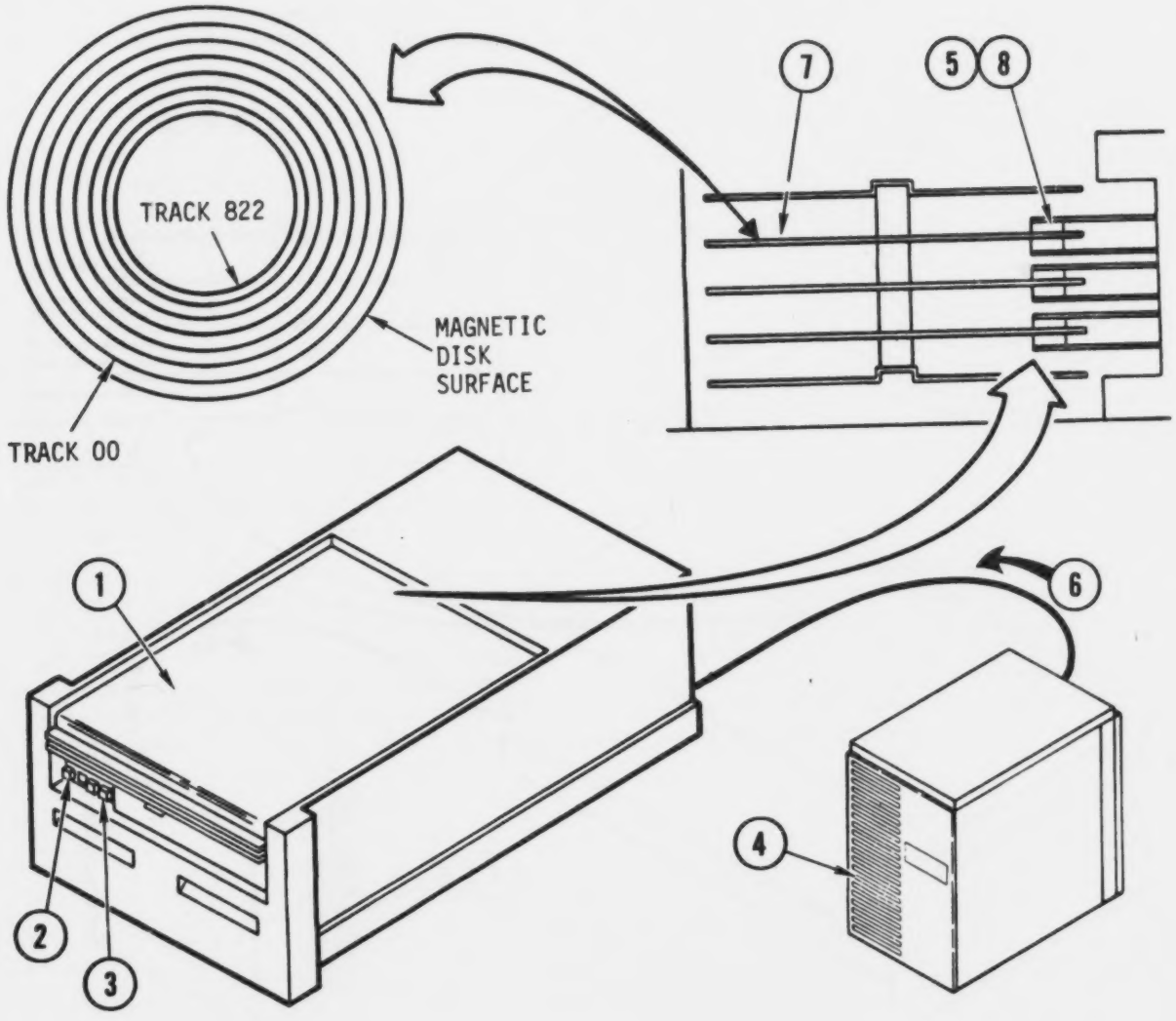
(5) Servo head reads data from servo disk surface and positions read/write heads.

(6) CPU reads out data stored on disk data surfaces at addresses given.

(7) When all data from given address is read out and no further instructions are received from CPU, all heads are retracted.

Figure 1-2. Read Only Operation

1-14. WRITE ONLY OPERATION



(1) Disk pack is loaded into disk drive.
(2) Disk drive is cycled up and READY light is lit.
(3) PROTECT light is out. (Must be out for write operations.)
(4) CPU sends command and address to disk drive.
(5) Servo head reads data from servo disk and positions read/write head.
(6) CPU sends data.
(7) Data is written (recorded) on disk pack data surface.
(8) When data transmission is complete and no further instructions come from CPU, all heads are retracted.

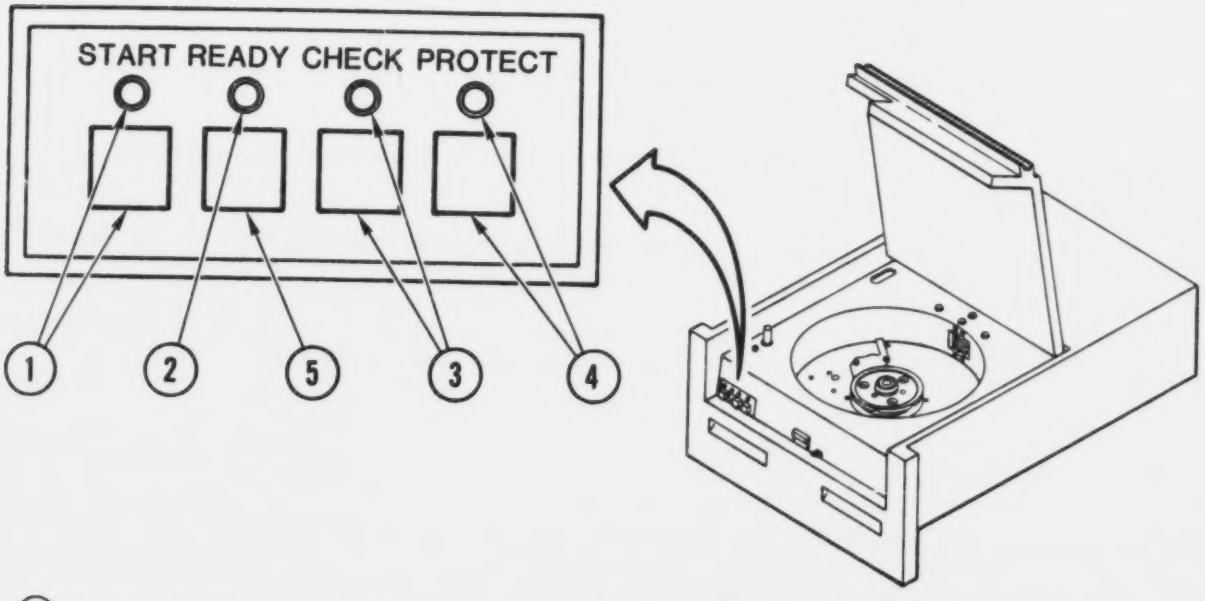
Figure 1-3. Write Only Operation

CHAPTER 2
OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS

2-1. CONTROLS AND INDICATORS

The disk drive design provides easy access to operator controls and power switches (fig. 2-1). This aids in operations, servicing and cleaning, and emergency shutdown.



(1) START (Pushbutton/indicator)	Indicator lights when spindle is started. If drive is powered ON, unit may be started by pressing pushbutton.
(2) READY (Indicator)	Indicator lights when the spindle is rotating at proper speed. Heads are loaded, no fault condition exist, and unit is ready to accept commands.
(3) CHECK (Pushbutton/indicator)	Indicator lights when fault condition exists within disk drive. Press pushbutton to reset.
(4) PROTECT (Pushbutton/indicator)	Indicator lights when unit is in protect mode. Writing on disk pack is prevented. Press pushbutton to select correct write/ permit mode.
(5) LOGICAL ADDRESS PLUG	Determines logical address of disk drive. Address can be set from "0" to "15".

Figure 2-1. Controls and Indicators

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

2-2. GENERAL

Operator's Preventive Maintenance Checks and Services (PMCS) are the required daily and weekly inspection and care of the equipment necessary to keep it in good operating condition. PMCS shall be done before (B) operation, during (D) operation and after (A) operation. Other checks and services are done on a weekly (W) or monthly (M) cycle.

NOTE

Always observe all WARNINGS and CAUTIONS when you perform the PMCS procedures.

a. Before operation. Do your before (B) PMCS to be sure that the equipment is ready for operation.

b. During operation. Do your during (D) PMCS to be sure that the equipment is operating properly.

c. After operation. Do your after (A) PMCS so that the equipment will be ready for future operation.

d. If your equipment fails to operate. Refer to chapter 3 for troubleshooting procedures. Report any deficiency on DA Form 2404. See TM 38-750.

2-3. PMCS PROCEDURES

PMCS procedures are done at fixed intervals for the following purposes:

- Make sure that the equipment is operable
- Prevent equipment problems in future operation
- Identify and resolve minor problems in the equipment before they become major problems
- Scheduled cleaning of the equipment

a. PMCS Table. The PMCS procedures are contained in table 2-1. This information is given by item number, interval, item inspected, procedure and criteria for rejection. An explanation of the contents of each column is given below.

(1) Item Number Column. The checks and services are numbered in chronological order. The numbers in this column shall be used in the TM Item No. column of DA Form 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PMCS.

(2) Interval Column. This column identifies the interval at which the check or service is performed. Only those columns are used which are pertinent to the equipment.

(3) Item To Be Inspected Column. The equipment or portion of the equipment being checked or serviced is listed in this column.

(4) Procedures Column. This column contains the check or service procedure.

(5) Equipment Is Not Ready/Available If: Column. The reason why an equipment will be classified as unable to perform its mission will be given in this column. An entry in this column will:

(a) Identify conditions that make the equipment not ready/available for readiness reporting purposes.

(b) Deny use of the equipment until corrective maintenance has been performed.

b. Routine Checks. Checks like equipment inventory, cleaning, dusting, washing, checking for frayed cables, storing items not in use, covering unused receptacles and checking for loose nuts and bolts are not listed in your PMCS. They are things you should do anytime you see they must be done. If you find a routine check like one of these listed in your PMCS, it was listed because other operators reported problems with this item.

Table 2-1. Preventive Maintenance Checks and Services

NOTE

If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation. Make the complete checks and services when the equipment can be shut down.

NOTE: Within designated inverval, these checks are to be done in the order listed.

B = Before D = During

Perform weekly as well as before PMCS if:
(1) You are the assigned operator and have not operated the equipment since the last weekly.
(2) You are operating the equipment for the first time.

Table 2-1. Preventive Maintenance Checks and Services -- Continued

Item No.	Interval B	Interval D	Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment is Not Ready/Available If:
1	•		Disk Chamber	Check if heads are fully retracted. Check disk chamber for dust buildup.	Heads extend into chamber area. Dust buildup in disk chamber.
2	•		Spindle	Check for cleanliness. Clean if you see grease or dust buildup. Use a clean, lint-free cloth.	
3	•		Disk Pack	Make sure there is no moisture on disk canister before you install magnetic disk pack.	Moisture on magnetic disk pack canister.
4		•	CHECK Indicator	Make sure CHECK indicator is not lit.	CHECK indicator stays lit.

Section III. OPERATION UNDER USUAL CONDITIONS

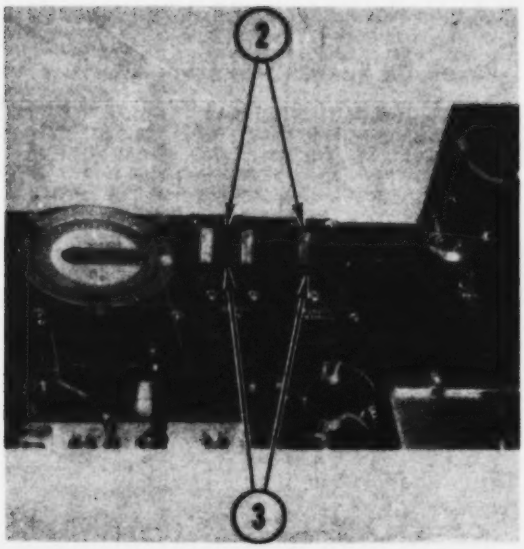
2-4. ASSEMBLY AND PREPARATION FOR USE

Assembly and preparation for use is a function of organizational maintenance personnel. No assembly and preparation by the operator is required.

2-5. OPERATING PROCEDURES

Before data processing can take place the disk drive must be powered on, disk pack loaded, and disk drive cycled up. After all data transmission is completed, the disk drive must be cycled down, unloaded and powered off. Paragraphs 2-6 thru 2-10 contain instructions for operating the disk drive.

2-6. POWER ON/OFF DISK DRIVE



CAUTION

Before proceeding with following task, refer to your system manual to insure all preconditions exist.

NOTE

Your system can contain two or more disk drives. Follow these steps to power on/off any of them.

Power on

1. Pull out disk drive drawer.

NOTE

There are two power circuit breakers at rear of drive. You must pull up both to power on drive.

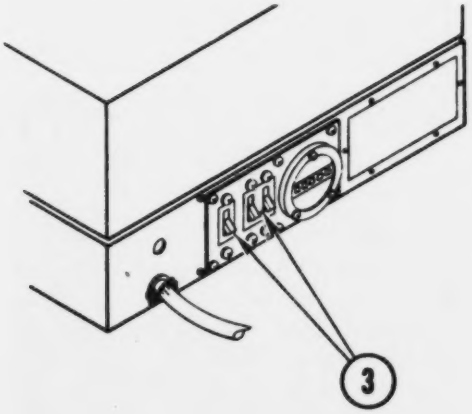
2. Lean over drive. Find power circuit breakers.
3. Pull up on both circuit breakers.
4. Push in disk drive drawer.

Power Off

NOTE

If READY indicator is lit, press START pushbutton to cycle down drive. Wait one minute for disk pack to stop.

1. Pull out disk drive drawer.
2. Lean over drive. Find two power circuit breaker at back of drive.
3. Push down both circuit breakers.
4. Push in disk drive drawer.



2-7. LOAD/UNLOAD MAGNETIC DISK PACK

CAUTION

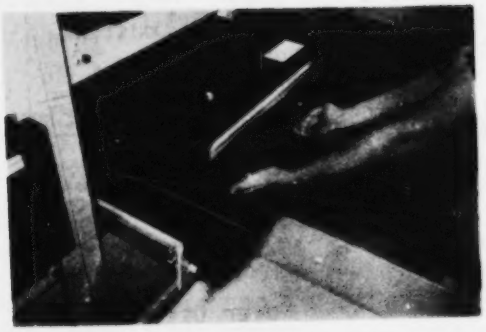
Before proceeding with the following task, refer to your system manual to insure all preconditions exist.

NOTE

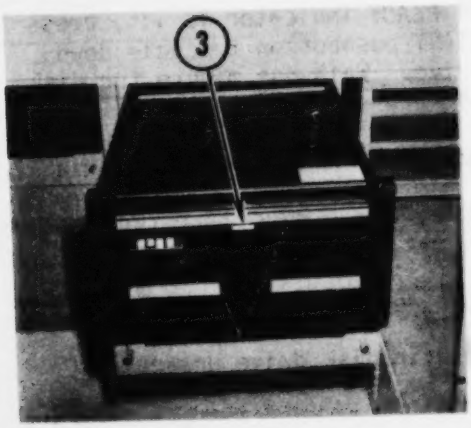
Follow these steps to load/unload disk pack in any disk drive.

Load

1. Power ON (para 2-6).



2. Pull out disk drive drawer.

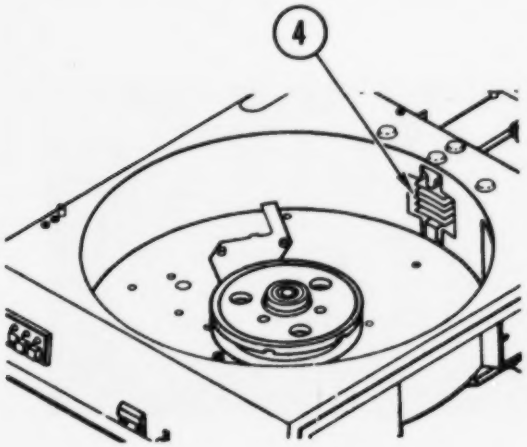


3. Press release latch and lift pack access cover.

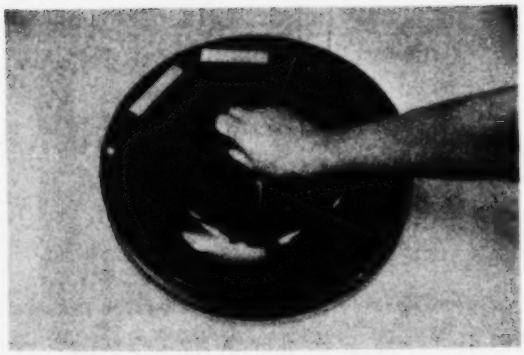
NOTE

Some drives have a pack cover solenoid which locks latch when power is off to drive. If latch will not release, check that power is on to drive.

2-7. LOAD/UNLOAD MAGNFTIC DISK PACK (CONT)



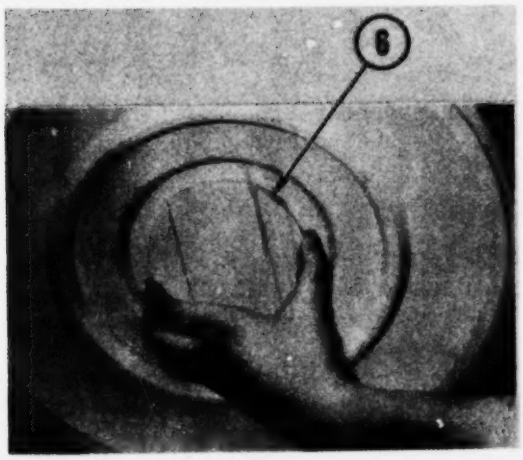
4. Look at heads inside drive. They must be completely pulled back. If not tell your supervisor. Do not load disk pack.



5. Select disk you will load. Grasp canister handle and lift.

CAUTION

Never touch surface of disk pack.

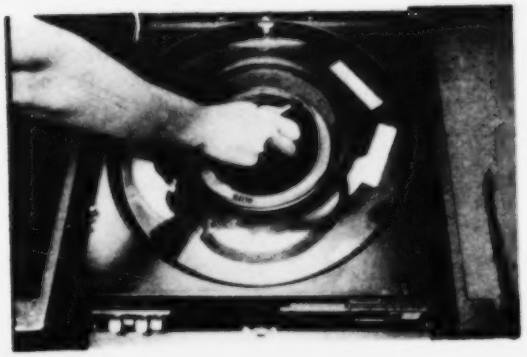


6. With other hand squeeze mid-section of bottom cover and pull. Set bottom cover to the side.

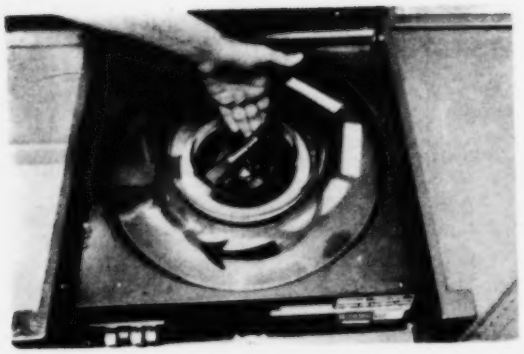
NOTE

Other types of canisters may open differently.

2-7. LOAD/UNLOAD MAGNETIC DISK PACK (CONT)



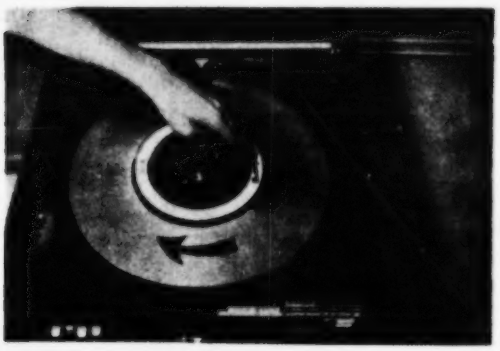
7. Carefully set pack on spindle.



8. Turn handle clockwise as shown until it stops.

9. Grasp handle and lift canister. Set it in bottom cover.

2-7. LOAD/UNLOAD MAGNETIC DISK PACK (CONT)

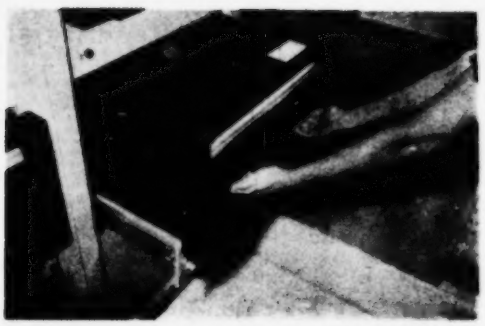


10. Touching only the guard plate, spin pack as shown. It must turn freely.
11. Close pack access cover.
12. Push in disk drive drawer.

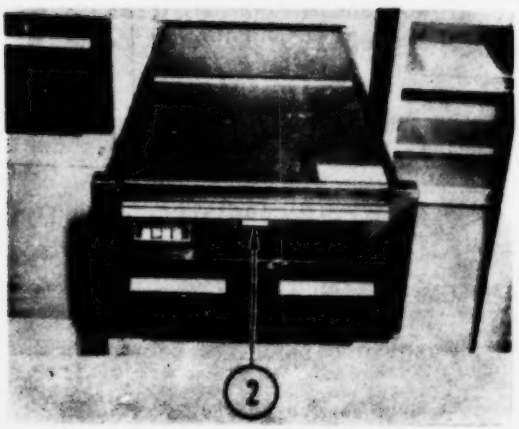
Unload

NOTE

If READY indicator is lit, press START button to cycle down drive. Wait one minute for disk pack to stop spinning.



1. Pull out disk drive drawer.

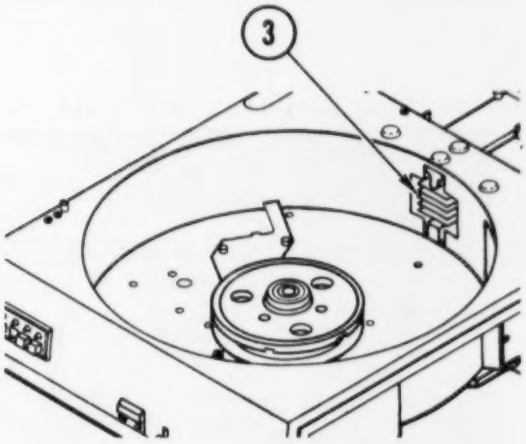


2. Press release latch and lift pack access cover.

NOTE

Some drives have a pack cover solenoid which locks latch for up to one minute after drive is cycled down. If latch does not release right away, wait and try again.

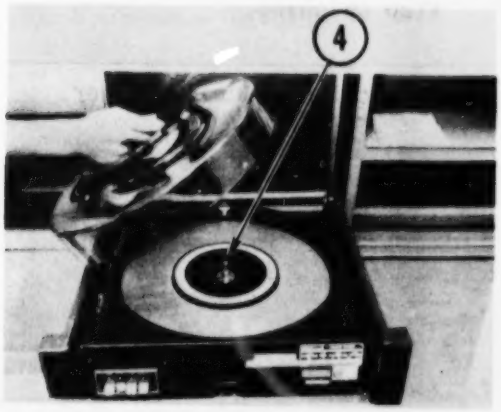
2-7. LOAD/UNLOAD MAGNETIC DISK PACK (CONT)



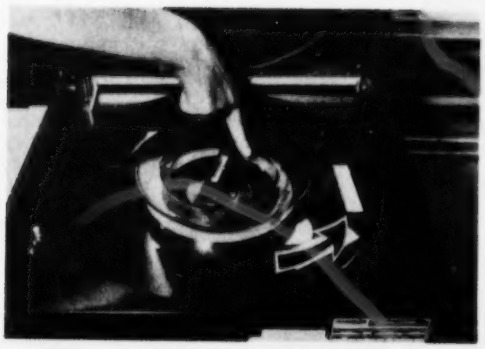
3. Check heads. They must be completely retracted.

CAUTION

If heads are not fully retracted notify your supervisor. Do not attempt to unload disk pack.

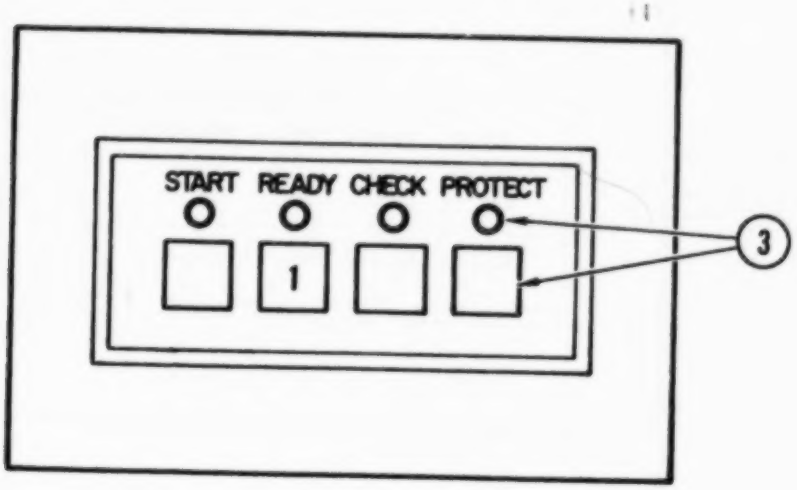


4. Place canister over pack so center post goes into canister handle.



5. Turn handle counterclockwise as shown until you hear a clicking noise.
6. To remove pack, grasp handle and lift.
7. Set pack in cannister. Return it to storage.
8. Close pack access cover.
9. Push in disk drive drawer.

2-8. CYCLE UP/CYCLE DOWN DISK DRIVE



Cycle up

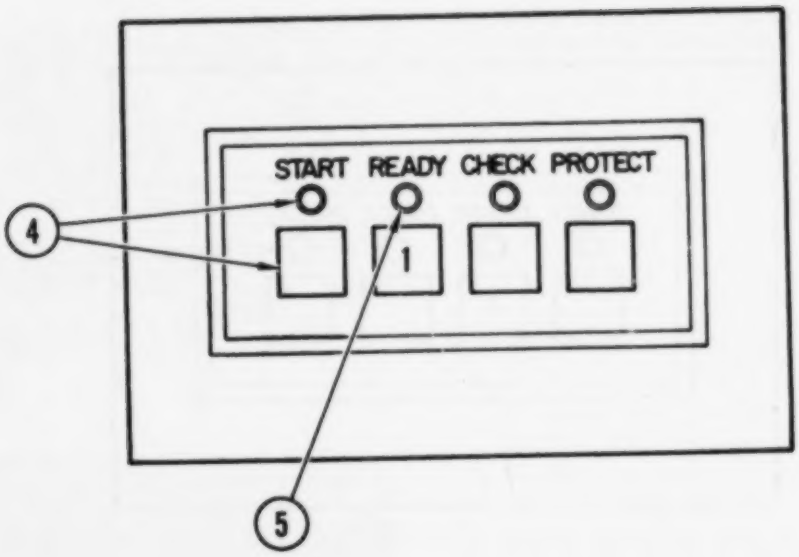
1. Power on disk drive (para 2-6).

2. Load disk pack (para 2-7, Load).

3. Set PROTECT.

   - Indicator must be lit if disk pack will be used only for read operations
   - Indicator must be out if disk pack will be used for write operations

2-8. CYCLE UP/CYCLE DOWN DISK DRIVE (CONT)



CAUTION

To avoid a head crash, observe minimum warmup conditions. (See your system manual.)

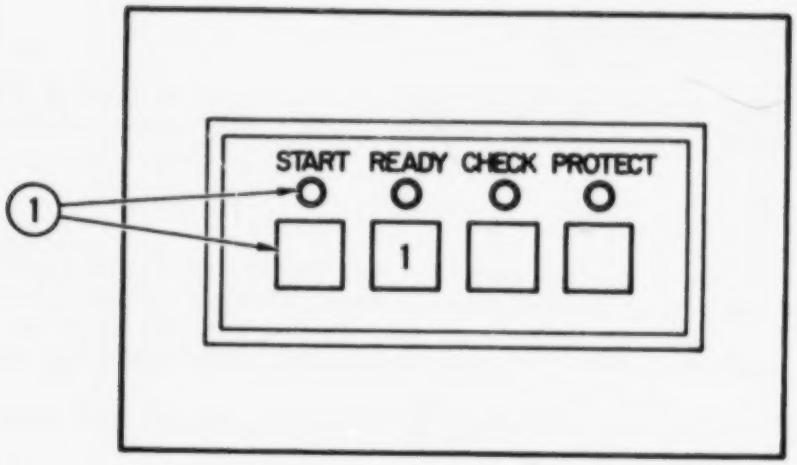
4. To cycle up, press START button. START indicator should light.

5. Make sure READY indicator lights. This may take up to 60 seconds.

NOTE

If READY indicator does not light, begin troubleshooting (para 3-2).

2-8. CYCLE UP/CYCLE DOWN DISK DRIVE (CONT)



Cycle Down

1. To cycle down, press START button. START and READY indicators should go out. Wait one minute. When disk drive stops, remove disk pack.

NOTE

Do not leave pack on idle drive.

2-9. PREPARATION FOR MOVEMENT

Preparation for movement is an organizational maintenance task. You must unload and properly store disk pack before movement.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-10. OPERATION IN UNUSUAL WEATHER

When operating in unusal weather conditions the disk pack and disk drive requires special precautions before and during operation. Your system manual will cover all preconditions.

2-11. DISK DRIVE

The disk drive is designed to operate normally in a climate-controlled area protected from dust, smoke, condensation and extreme dryness. If the climate control equipment fails, you can continue to operate the disk drive if the room temperature is not lower than 50°F (10°C) or higher than 100°F (38°C).

WARNING

Do not allow wet cloths used for emergency humidification to drip on floor or near electronic equipment in operating area. A shock hazard will result.

When operating in extremely dry climate you must use a humidifier to raise the relative humidity above 10%. If the humidifier fails, soak cloths or towels with water and hang them in the work area away from equipment. The evaporation which results will raise the humidity and allow you to continue operation. Monitor the humidity while you operate to make sure it is at least 10%.

2-12. DISK PACKS

A disk pack must be dry and free of contaminants, such as dust and smoke, before you cycle it up on the disk drive. If a disk pack shows condensation or water droplets on the inside of the cannister, do not cycle it up on the disk drive. Install the pack in the drive and power ON. The blower will run and dry the moisture from the disk pack. This takes about 10 minutes when the relative humidity in the work area is 20% or less. Allow more drying time for higher relative humidity.

Because the disk drive heads float on a layer of air (fig. 2-2) as they read and write on the disk, dust or smoke particles on the disk surface can cause a head crash and damage the disk. Never cycle up a disk drive when dust or smoke is present in the operating environment.

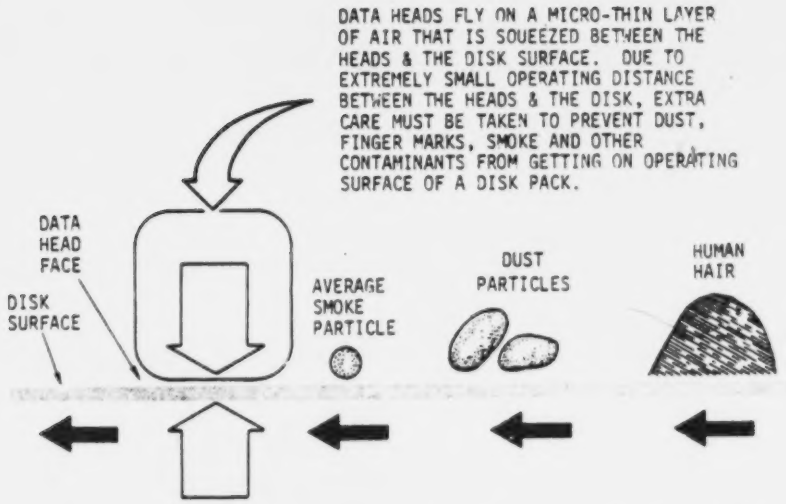

DATA HEADS FLY ON A MICRO-THIN LAYER OF AIR THAT IS SQUEEZED BETWEEN THE HEADS & THE DISK SURFACE. DUE TO EXTREMELY SMALL OPERATING DISTANCE BETWEEN THE HEADS & THE DISK, EXTRA CARE MUST BE TAKEN TO PREVENT DUST, FINGER MARKS, SMOKE AND OTHER CONTAMINANTS FROM GETTING ON OPERATING SURFACE OF A DISK PACK.
DATA HEAD FACE
DISK SURFACE
AVERAGE SMOKE PARTICLE
DUST PARTICLES
HUMAN HAIR

Figure 2-2. Head Flying Distance vs. Contaminant Size

When operating in extremely dusty or polluted climate, you must:

- Have maintenance personnel check absolute filter more frequently
- Not allow the disk packs to remain uncovered for any period of time
- Not load or unload a disk pack when disk drive is powered off (the blower and filter help to keep dust, smoke, and condensation out of disk pack and drive)
- Load and unload disk packs quickly
- Make sure disk canisters are tightly sealed, even when empty

2-13. RAPID TEMPERATURE CHANGES DURING OPERATION

Although the disk drive operates best between 50°F and 100°F, temperature changes in either direction faster than 12°F/hr may cause the unit to fail. If a rapid change in temperature is possible, you must monitor the temperature while you operate the equipment. If there is a temperature change in either direction faster than 12°F/hr, the disk drive must be shut down until the temperature is under control. For example, if the temperature is 70°F when you start operation and one hour later is 85°F you must shut down.

CHAPTER 3
MAINTENANCE INSTRUCTIONS

Section I. LUBRICATION INSTRUCTIONS

3-1. LUBRICATION

The disk drive does not require lubrication.

Section II. TROUBLESHOOTING PROCEDURES

3-2. GENERAL

Table 3-1 lists the common malfunctions which you may find during the operation or maintenance of the disk drive or its components. You should perform the tests/inspections and corrective actions in the order listed.

This manual cannot list all malfunctions that may occur, nor all test or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions notify you superivisor.

Table 3-1. Troubleshooting

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION
1. DISK DRIVE DOES NOT CYCLE UP WHEN START BUTTON IS PUSHED.
Step 1. Check if pack access cover is down and latched.
Secure access cover.
2. DISK DRIVE DOES NOT POWER UP.
Step 1. Check source power circuit breaker. (See your system manual.)
Close circuit breaker.
Step 2. Check power supply circuit breakers
Close circuit breakers at back of disk drive.
3. CHECK INDICATOR LIGHTS.
Step 1. Press CHECK button.
If indicator goes out, press START. If indicator does not go out, tell your supervisor that maintenance is required.

Section III. MAINTENANCE PROCEDURES

3-3. GENERAL

This disk drive does not require operator maintenance.

APPENDIX A

REFERENCES

A-1. SCOPE

This appendix lists all forms, technical manuals and miscellaneous publications referenced in this manual.

A-2. FORMS

Equipment Inspection and Maintenance Worksheet ..... DA Form 2404
Quality Deficiency Report ..... Form SF 368
Recommended Changes to Equipment Technical Manuals ..... DA Form 2028-2
Recommended Changes to Publications and Blank Forms ..... DA Form 2028

A-3. TECHNICAL MANUALS

Hand Receipt Manual: Disk Memory Unit MU-705/MYQ-4 ..... TM 11-7025-208-10-HR
The Army Maintenance Management System (TAMMS) ..... TM 38-750

A-4. MISCELLANEOUS PUBLICATIONS

Consolidated Index of Army Publications and Blank Forms ..... DA Pam 310-1

APPENDIX B

COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS

Section I. INTRODUCTION

B-1. SCOPE

This appendix lists components of end item and basic issue items for the disk drive to help you inventory items required for safe and efficient operation.

B-2. GENERAL

The Components of End Item and Basic Issue Items Lists are divided into the following sections:

a. Section II. Components of End Item. This listing is for informational purposes only, and is not authority to requisition replacements. These items are part of the end item, but are removed and separately, packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.

b. Section III. Basic Issue Items. These are the minimum essential items required to place the disk drive in operation, to operate it, and to perform emergency repairs. Although shipped separately packaged BII must be with the disk drive during operation and whenever it is transferred between property accounts. The illustrations will assist you with hard-to-identify items. This manual is your authority to request/requisition replacement BII, based on TOE/MTOE authorization of the end item.

B-3. EXPLANATION OF COLUMNS

The following provides an explanation of columns found in the tabular listings:

Column (1) -- Illustration Number (Illus Number). This column indicates the number of the illustration in which the item is shown.

Column (2) -- National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

Column (3) -- Description. Indicates the National item name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the Federal Source Code for Manufacturer (FSCM) in parentheses followed by the part number. If item needed differs for different models of this equipment, the model is shown under the "Usable On" heading in this column.

These codes are identified as:

Code	Used On
PAA	Model XXX
PAB	Model XXXX
PAC	Model XXXX

Column (4) -- Unit of Measure (U/M). Indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr).

Column (5) -- Quantity required (Qty rqr). Indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM

(Not applicable)

Section III. BASIC ISSUE ITEMS

(Not applicable)

APPENDIX C
ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

C-1. SCOPE

This appendix lists additional items you are authorized for the support of the disk drive.

C-2. GENERAL

This list identifies items that do not have to accompany the disk drive and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

C-3. EXPLANATION OF LISTING

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you.

Section II. ADDITIONAL AUTHORIZATION LIST

(Not applicable)

APPENDIX D
EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

D-1. SCOPE

This appendix lists expendable supplies and materials you will need to operate and maintain the disk drive. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS

Column (1) -- Item number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App. D").

Column (2) -- Level. This column identifies the lowest level of maintenance that requires the listed item.

C -- Operator/Crew
O -- Organizational Maintenance
F -- Direct Support Maintenance

Column (3) -- National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

Column (4) -- Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.

Column (5) -- Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description	(5) U/M
	C	8305-00-222-2423	Cloth, Lintfree	YD

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Stateside Army Depot
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Stateside, N.J. 07703

DATE SENT
10 July 1975

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 11-5840-340-12	23 Jan 74	Radar Set AN/PRC-76

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PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
2-25	2-28		
3-10	3-3		3-1
5-6	5-8		
		F03	

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Recommend that the installation antenna alignment procedure be changed throughout to specify a 2^{o} IFF antenna lag rather than 1^{o}.

REASON: Experience has shown that with only a 1^{o} lag, the antenna servo system is too sensitive to wind gusting in excess of 25 knots, and has a tendency to rapidly accelerate and decelerate as it hunts, causing strain to the drive train. Hunting is minimized by adjusting the lag to 2^{o} without degradation of operation.

Item 5, Function column. Change "2 db" to "3db."

REASON: The adjustment procedure for the TRANS POWER FAULT indicator calls for a 3 db (500 watts) adjustment to light the TRANS POWER FAULT indicator.

Add new step f.1 to read, "Replace cover plate removed in step e.1, above."

REASON: To replace the cover plate.

Zone C 3. On J1-2, change "+24 VDC to "+5 VDC."

REASON: This is the output line of the 5 VDC power supply. +24 VDC is the input voltage.

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER
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SIGN HERE
I. M. DeSpiritof

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